

About Our Presenters

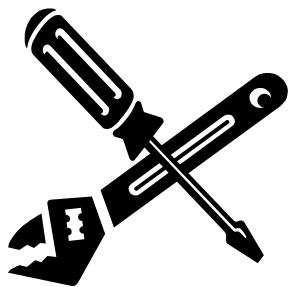
Mr. Steve Allbee - USEPA Project Director, Gap Analysis; primary author, USEPA's *The Clean Water and Drinking Water Infrastructure Gap Analysis*; 25 years EPA - development of financing programs; BA, MA, MPA.

Mr. Roger Byrne - Principal, Global Service Manager, GHD's Asset Management Group, Melbourne, Aus; principal author, *International Infrastructure Management Manual*; 30 years infrastructure management experience; author of over 40 manuals and guides; has executed over 100 Asset Management "Best Practice" audits; BCE, NPPE.

Mr. Lynn Norton - Western Director, Parsons Asset Management Center (PAMC); Former utilities director with over 28 years utility management experience; USEPA Operations Excellence Awards recipient; BA, MPA.

Mr. Duncan Rose - Technical Director, PAMC; Former city/county manager; co-author of WEF's *Managing the Water/Wastewater Utility*; 30 years state & local management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA.

Mr. Doug Stewart - Asset Management Program Director, Orange County Sanitation District; 25 years engineering experience, 10 years utility management; P.E.; BS, MSCE.



The "Best Practice" Self-Audit

To assist your organization to better understand its current advanced asset management status, this year's EPA workshops will include a "benchmarking" exercise. This exercise allows you to benchmark your agency's key asset management practices and activities against those deemed to be "worlds best practices".

All participating agencies are asked to complete a 'basic self-audit' questionnaire. Each of the exercise elements in the workshop will assist you to complete the questionnaire. At the end of all workshops, the returns will be aggregated and each participating agency will receive a basic benchmark report showing:

- ◆ How it rates against the best practice levels
- ◆ How the average agency attending the workshops rated, and
- ◆ A short report identifying the most critical areas for your organization using the "Australian Value Chain" approach.

All data will remain anonymous.

Advancing Asset Management In Your Utility: A "Hands-on" Workshop Approach

Sept 9th & 10th, 2003

Laclede's Landing

Embassy Suites

(Downtown)

St Louis, Missouri

Advancing Asset Management In Your Utility:

A "Hands-on" Workshop Approach

"We are excited to be able to offer this training in Missouri."

Steve Mahfood, Director

Missouri Department of Natural Resources

- ◆ The workshops are funded by USEPA as a service to utility managers.
- ◆ Please register as early as possible.
- ◆ Due to limited seating, this workshop is restricted to public officials.
- ◆ There is a \$40 per person charge for the workshop to cover the room, coffee, lunch each day and other incidental costs.
- ◆ Workshops will begin promptly at 8:00 am each day.

Please sign-up for this workshop by contacting:
Kristi Dorge
Missouri Department of Natural Resources
1-800-361-4827
nrdorgk@mail.dnr.state.mo.us

For additional information, hotel details and a map to workshop location, please visit:

www.epa.gov/owm/featinfo.htm

MISSOURI DEPARTMENT OF NATURAL RESOURCES
USEPA
OFFICE OF WASTEWATER MANAGEMENT
PARSONS
ASSET MANAGEMENT CENTER (PAMC)

Advancing Asset Management In Your Utility:

A “Hands-on” Workshop Approach



The Challenge:

Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. Indeed, this infrastructural investment has played a substantial role in the sustained wealth, prosperity, and quality of life of our country. But in many communities, this infrastructure is severely stressed. It is stressed from over-use, systemic under-funding of maintenance and renewal, and aging.

“It is clear that, only through such efforts (Advanced Asset Management), will this Country be able to provide the sustained performance from its water infrastructure investment that our prosperity and quality of life have come to depend upon.”

G. Tracy Mehan III, Assistant Administrator for Water, USEPA

A comprehensive approach to managing our capital assets is overdue - one that brings “state of the practice” advanced asset management (AM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. *This approach, first and foremost, is one that focuses relentlessly on providing sustained performance of value to the customer at the lowest life-cycle cost.* Management thinking is centered on long-term cost effectiveness, service sustainability, and effective environmental management.

The Focus:

The great French author, Victor Hugo, once observed, *“An invasion of armies can be resisted, but not an idea whose time has come.”* Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead.

Practical advanced-techniques for better managing assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. *How can these asset management (AM) concepts, tools and techniques be most effectively transferred into the water and wastewater industry? Where to start? How to proceed? How to select which tools are most appropriate?*

The Workshops:

The AM challenge for US agency officials is one of “knowledge transfer”. For this reason, these workshops have been designed as an extensive “hands-on” experience. Each workshop is built around case-studies and participant exercises that demonstrate the concepts, techniques and tools of advanced asset management. But above all, they demonstrate an advanced asset management way of approaching difficult asset-driven problems. Each workshop is centered on “case-based” mentoring by expert asset management practitioners.

Workshops are designed around five core questions:

1. What do I own, where is it, what condition is it in?
2. What is my required sustained Level Of Service?
3. Given my system, what is critical to sustained performance?
 - ◆ How does it fail? How can it fail?
 - ◆ What is the likelihood of failure?
 - ◆ What does it cost to repair?
 - ◆ What are the consequences of failure?
4. What are my “minimum life-cycle cost strategies”?
 - ◆ What are the residual lives of my assets?
 - ◆ What alternative management options are feasible?
5. What is my required “replacement funding level”?

The workshops focus on demonstrating, *step-by-step*, how an agency would select and deploy “Best Appropriate AM Practices” that are best suited to that agency.

Agenda Highlights

Day ONE

Introductions

- Overview of next two days
- The Basic Audit Tool

Background and Context

- Why the focus on AM?
- The changing utility industry
- The emerging utility of tomorrow

Overview of Fundamental Concepts and Core Practices

- Sustainable performance at minimum “Total Cost of Ownership”
- How assets fail
- “Full economic cost”
- Risk/consequence tradeoffs
- The AM knowledge cycle
- Continuous improvement
- Payoffs and benefits/downsides

Exercise 1: Setting a “Sustainable” Level of Service (LOS)

- Process versus outcomes
- A “Balanced Scorecard” approach
- LOS as a strategic tool

Exercise 2: Determining Sustainable “Full Economic Cost”

- The “Full Economic Cost Model”
- What do I own? Where is it? What is its remaining useful life?
- Replacement values versus historic depreciation
- Reporting/disclosing the asset consumption “story”
- “Long-term Annualized Renewal Annuity”

Exercise 3: Sustaining Asset Performance

- Understanding how my assets can fail,
- What the likelihood of failure is
- What the consequences are
- Driving capital, operations and maintenance management

Day TWO

Exercise 4: Developing and Funding a “Lowest Life-cycle Cost” Capital Improvements Program (CIP)

- Strategic issues in developing the CIP list
- Role of the asset registry
- Role of the AM plan & the “Capex” process
- CIP validation
- The CIP “Strategic Business Plan”

Exercise 5: Meeting the IT Challenge - Toward an Enterprise Asset Management System (EAMS)

- Defining a “data standard” and “asset hierarchy”
- Defining “work processes”
- Defining “system functionality”
- Defining data needs and data flows
- Developing a work plan

Exercise 6: Deploying an AM Program

- The “Gap Analysis”
- The human side
- The political side
- Example work plans

Closing Summary, Questions, Comments, Evaluation, Completion of Basic Audit

